Patent Claims

1. Active compound combinations, comprising at least one compound of the formula

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$$H_3C$$
 CH_3
 CH_3

and

(1) a triazole derivative of the formula

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$$X \longrightarrow O \longrightarrow CH - Y - C(CH_3)_3$$
 (II),

in which

X represents chlorine or phenyl and

15

(2) the triazole derivative of the formula

$$CI$$
 CH_2
 CH

and/or

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(3) an aniline derivative of the formula

$$R^{1} \longrightarrow N \longrightarrow S \longrightarrow CCl_{2}F$$

$$SO_{2} \longrightarrow N(CH_{3})_{2}$$
(IV),

in which

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R1 represents hydrogen or methyl,

and/or

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(4) N-[1-(4-chloro-phenyl)-ethyl]-2,2-dichloro-1-ethyl-3-methyl-cyclopropane-carboxamide of the formula

$$CI \longrightarrow CH-NH-C \longrightarrow CH_3 \qquad (V)$$

(carpropamid)

(5) the zinc propylene-1,2-bis-(dithiocarbamidate) of the formula

and/or

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(6) at least one thiocarbamate of the formula

Me = Zn or Mn or a mixture of Zn and Mn

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and/or

(7) the aniline derivative of the formula

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and/or

(8) the compound of the formula

$$(CH_3)_2CH-O-C-NH-CH-C-NH-CH-C-NH-CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

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(iprovalicarb)

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and/or

(9) the benzothiadiazole derivative of the formula

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$$H_3CS-C$$
 S
 N
 (X)

(acibenzolar-S-methyl)

and/or

(10) the 8-t-butyl-2-(N-ethyl-N-n-propyl-amino)-methyl-1,4-dioxa-spiro[5,4]-decane of the formula

$$(CH_3)_3C$$
 C_2H_5 C_3H_7-n (XI)

(spiroxamine)

and/or

15

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(11) the compound of the formula

(12) the compound of the formula

$$CH_3$$
 CF_3
 CH_3
 CF_3
 CH_3
 CF_3
 CH_3
 CF_3
 CF_3

5 and/or

(13) the compound of the formula

10 and/or

(14) the cyanoxime derivative of the formula

(15) a pyrimidine derivative of the formula

in which

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R² represents methyl, —C≡C—CH₃ (mepanipyrim) or cyclopropyl (cyprodinyl),

10 and/or

(16) an aniline derivative of the formula

$$\begin{array}{c|c} CH_3 & CH_3 \\ \hline & CH-COOCH_3 \\ \hline & C-CH_{\overline{2}}O-CH_3 \\ \hline & CH_3 & O \end{array} \tag{XVII)}$$

(metalaxyl or metalaxyl M)

15 and/or

(17) the morpholine derivative of the formula

$$\begin{array}{c|c}
O & & & \\
\hline
O & N-C-CH=C & & \\
\hline
(CI) & & & \\
(CI) & & & \\
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(CI) & & \\
(CI) & & & \\
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(CI) & & \\
(CI) & & \\
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(CI) & & \\
(CI) & &$$

and/or

(18) the phthalimide derivative of the formula

and/or

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(19) the phosphorus compound of the formula

$$\begin{bmatrix} H_5C_2O & O \\ H & O \end{bmatrix}_3 AI$$
 (fosetyl-AI)

and/or

(20) the hydroxyethyl-triazole derivative of the formula

(21) the 1-[(6-chloro-3-pyridinyl)-methyl]-N-nitro-2-imidazolidinimine of the formula

5 and/or

(22) the oxazolidinedione of the formula

10 and/or

(23) the benzamide derivative of the formula

$$\begin{array}{c|c} CI & O & CH_3 \\ \hline \\ H_3C & C-NH-C & C-CH_2CI \\ \hline \\ C_2H_5 & O \end{array} (XXIV)$$

(zoxamide)

(24) the guanidine derivative of the formula

$$R^{3}$$
 R^{3} R^{3

in which

m represents integers from 0 to 5 and

R³ represents hydrogen (17 to 23%) or the radical of the formula

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and/or

15 (25) the triazole derivative of the formula

$$CI \longrightarrow CH - C_3H_7 - n$$

$$CH_2 \qquad (XXVI)$$

$$N \longrightarrow N \qquad \text{(penconazole)}$$

(26) the halogeno-benzimidazole of the formula

$$\begin{array}{c|c} F & O & \\ \hline & & \\ & &$$

and/or

5

(27) the halogenopyrimidine of the formula

and/or

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(28) the tetrachloro-isophthalo-dinitrile of the formula

(chlorothalonil)

(29) the compound of the formula

$$H_3C$$
 O
 N
 CH_3
 CH_3
 CH_3
(propamocarb)

and/or

5 (30) the pyridineamine of the formula

$$CF_3$$
 NO_2
 CI
 O_2N
 CF_3
 CF_3
 $(XXXI)$

and/or

10 (31) the thiazolecarboxamide of the formula

(ethaboxam)

and/or

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(32) the sulphonamide of the formula

(cyamidazosulfamid)

and/or

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(33) the compound of the formula

and/or

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(34) the compound of the formula

(iprodione)

15 and/or

(35) the compound of the formula

(procymidone)

and/or

5 (36) the diamide of the formula

$$H_3C$$
 CH_3
 CH_3

10 and/or

(37) the methoxyacrylate derivative of the formula

15 (picoxystrobin)

and/or

(38) the quinoline derivative of the formula

(quinoxyfen)

and/or

5 (39) the phenylamide derivative of the formula

(oxadixyl)

10 and/or

(40) the phenylamide derivative of the formula

15 (benalaxyl)

and/or

(41) the dicarboxime derivative of the formula

(captan)

and/or

(42) the phosphonic acid of the formula

(phosphonic acid)

10 and/or

5

(43) the pyrrole derivative of the formula

15 (fludioxonil)

and/or

(44) the phenyl carbonate of the formula

(diethofencarb)

and/or

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(45) the copper compounds

- a) copper oxychloride (XXXXVIa)
- b) copper hydroxid (XXXXVIb)

10 and/or

(46) the imidazole derivative of the formula

15 (prochloraz)

(47) the triazole derivative of the formula

a)

(difenconazole)

5 and/or

b)

(hexaconazole)

10 and/or

c)

(cyproconazole)

15

d)

$$F \longrightarrow Si \longrightarrow N$$

$$(XXXXVIIId)$$

(flusilazole)

(propiconazole)

5

and/or

e)

10

and/or

f)

15

(myclobutanil)

and/or

g)

5 (fenbuconazole)

and/or

h)

$$\begin{array}{c|c} CF_{\overline{2}} CHF_{2} \\ \hline \\ CI \\ \end{array} \qquad (XXXXVIIIh)$$

(tetraconazole)

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and/or

15 (48) a compound of the general formula

in which

R¹ represents unsubstituted or fluorine-, chlorine-, bromine-, methyl- or ethyl-substituted phenyl, 2-naphthyl, 1,2,3,4-tetrahydronaphthyl or indanyl,

and/or

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(49) N-methyl-2-(methoxyimino)-2-[2-([1-(3-tri-fluoro-methyl-phenyl)ethoxy]iminomethyl)phenyl]acetamide of the formula

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

and/or

15 (50) 2,4-dihydro-5-methoxy-2-methyl-4-[2-([([1-(3-tri-fluoro-methylphenyl)ethylidene]amino)oxy]methyl)phenyl]-3H-1,2,4-triazol-3-one of the formula

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(51) the compound of the formula

- 5
- 2. Active compound combinations according to Claim 1, comprising at least one compound of the formula (I) as defined in Claim 1 and
 - (3) an aniline derivative of the formula

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and/or

(5) the zinc propylene-1,2-bis-(dithiocarbamidate) of the formula

15

(6) at least one thiocarbamate of the formula

Me = mixture of Zn and Mn

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and/or

(7) the aniline derivative of the formula

10

and/or

(8) the compound of the formula

$$(CH_3)_2CH-O-C-NH-CH-C-NH-CH-C-NH-CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

15

(iprovalicarb)

(11) the compound of the formula

and/or

5

(12) the compound of the formula

$$CF_3$$
 CF_3
 CH_3
 CF_3
 CH_3
 CF_3
 CF_3

10 and/or

(13) the compound of the formula

$$\begin{array}{c|c} CI & & \\ \hline \\ N & N & N - O \\ \hline \\ N_{3}C' & O - N & O - \end{array}$$
 (XIV)

(18) the phthalimide derivative of the formula

and/or

5

(20) the hydroxyethyl-triazole derivative of the formula

$$CI \longrightarrow CH_{2} \longrightarrow CI$$

$$CH_{2} \longrightarrow CI$$

$$CH_{3} \longrightarrow CI$$

$$CH_{2} \longrightarrow CI$$

$$CH_{3} \longrightarrow CI$$

$$CH_{4} \longrightarrow$$

and/or

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(26) the halogeno-benzimidazole of the formula

$$\begin{array}{c|c} F & O & N \\ \hline & & & \\$$

and/or

15

(27) the halogenopyrimidine of the formula

and/or

5

(28) the tetrachloro-isophthalo-dinitrile of the formula

(chlorothalonil)

and/or

10

(30) the pyridinamine of the formula

$$CF_3$$
 NO_2
 CI
 NO_2
 CF_3
 CF

(45) the copper compounds

a) copper oxychloride

(XXXXVIa)

b) copper hydroxide

(XXXXVIb).

- 5 3. Composition according to Claim 1, characterized in that in the active compound combinations the weight ratio of active compound of the formula (I) to
 - active compound of group (1) is from 1:0.1 to 1:50,
 - active compound of group (2) is from 1:0.1 to 1:50,
 - active compound of group (3) is from 1:1 to 1:150,
 - active compound of group (4) is from 1:0.1 to 1:10,
 - active compound of group (5) is from 1:1 to 1:150,
 - active compound of group (6) is from 1:1 to 1:150,
 - active compound of group (7) is from 1:0.1 to 1:50,
 - active compound of group (8) is from 1:0.1 to 1:50,
 - active compound of group (9) is from 1:0.02 to 1:50,
 - active compound of group (10) is from 1:0.1 to 1:50,
 - active compound of group (11) is from 1:0.1 to 1:50,
 - active compound of group (12) is from 1:0.1 to 1:50,
 - active compound of group (13) is from 1:0.1 to 1:50,
 - active compound of group (14) is from 1:0.1 to 1:50,
 - active compound of group (15) is from 1:0.2 to 1:50,
 - active compound of group (16) is from 1:0.1 to 1:50,
 - active compound of group (17) is from 1:0.1 to 1:50,
 - active compound of group (18) is from 1:1 to 1:150,
 - active compound of group (19) is from 1:0.1 to 1:150,
 - active compound of group (20) is from 1:0.02 to 1:50,
 - active compound of group (21) is from 1:0.05 to 1:20,
 - active compound of group (22) is from 1:0.1 to 1:50,
 - active compound of group (23) is from 1:0.1 to 1:50,

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	- active compound of group (24) is from 1:0.1 to 1:150,
	- active compound of group (25) is from 1:0.1 to 1:50,
	- active compound of group (26) is from 1:0.1 to 1:50,
	- active compound of group (27) is from 1:0.1 to 1:50,
5	- active compound of group (28) is from 1:1 to 1:150,
	- active compound of group (29) is from 1:1 to 1:150,
	- active compound of group (30) is from 1:0.1 to 1:50,
	- active compound of group (31) is from 1:0.1 to 1:50,
	- active compound of group (32) is from 1:0.1 to 1:50,
10	- active compound of group (33) is from 1:0.1 to 1:50,
	- active compound of group (34) is from 1:0.1 to 1:50,
	- active compound of group (35) is from 1:1 to 1:50,
	- active compound of group (36) is from 1:1 to 1:150,
	- active compound of group (37) is from 1:0.1 to 1:50,
15	- active compound of group (38) is from 1:0.1 to 1:50,
	- active compound of group (39) is from 1:0.1 to 1:50,
	- active compound of group (40) is from 1:0.1 to 1:50,
	- active compound of group (41) is from 1:1 to 1:150,
	- active compound of group (42) is from 1:1 to 1:150,
20	- active compound of group (43) is from 1:0.1 to 1:50,
	- active compound of group (44) is from 1:0.1 to 1:50,
	- active compound of group (45a) is from 1:1 to 1:150,
	- active compound of group (45b) is from 1:1 to 1:150,
	- active compound of group (46) is from 1:0.1 to 1:50,
25	- active compound of group (47a) is from 1:0.1 to 1:50,
	- active compound of group (47b) is from 1:0,1 to 1:50,
	- active compound of group (47c) is from 1:0.1 to 1:50,
	- active compound of group (47d) is from 1:0.1 to 1:50,
	- active compound of group (47e) is from 1:0.1 to 1:50,
30	- active compound of group (47f) is from 1:0.1 to 1:50,
	- active compound of group (47g) is from 1:0.1 to 1:50,

- active compound of group (47h) is from 1:0.1 to 1:50,
- active compound of group (48) is from 1:0.1 to 1:50,
- active compound of group (49) is from 1:0.1 to 1:50,
- active compound of group (50) is from 1:0.1 to 1:50,
- active compound of group (51) is from 1:0.1 to 1:50.
 - 4. Method for controlling fungi, characterized in that active compound combinations according to at least one of Claims 1 to 3 are applied to the fungi and/or their habitat.

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- 5. Use of active compound combinations according to any of Claims 1 to 3 for controlling fungi.
- 6. Process for preparing fungicidal compositions, characterized in that active compound combinations according to any of Claims 1 to 3 are mixed with extenders and/or surfactants.